



U.S. Department
of Transportation

**Federal Highway
Administration**

ORIGINAL

400 Seventh St., S.W.
Washington, D.C. 20590

MAR 11 1996

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Refer to: HVH-1

VIA MESSENGER
Mr. William Caton
The Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, DC 20554

RECEIVED

MAR 12 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Re: Notice of Proposed Rule Making
CC Docket No. 94-102

Dear Mr. Caton:

This letter will serve as the reply comments of the United States Department of Transportation (USDOT), Joint Program Office for Intelligent Transportation Systems (ITS), in the matter of the above-referenced rulemaking proceeding.¹ By its Public Notice dated February 16, 1996, the Commission sought comment on the February 13, 1996 ex parte presentation by the Cellular Telecommunications Industry Association (CTIA), and three principal public safety organizations: the National Emergency Number Association (NENA), Association of Public-Safety Communications Officials (APCO), and the National Association of State Nine One One Administrators (NASNA) (herein referred to as the "Public Safety Communicators" or PSCs).

The Joint Program Office for ITS would like to express its support for the Consensus Agreement.² We support and applaud the efforts of CTIA and the PSCs to reach consensus on the issues presented in this Docket to date. The functionality described for wireless E911 in the Consensus Agreement will greatly facilitate the implementation of several important ITS services³ that hold the potential to reduce traffic fatalities significantly by decreasing response

¹Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Notice of Proposed Rulemaking, 59 Fed. Reg. 54878 (1994) ("NPRM").

²"Public Safety-Wireless Industry Consensus: Wireless Compatibility Issues, CC Docket 94-102," filed February 13, 1996.

³The ITS program seeks to use advanced computer, control, and communications technologies to improve mobility, safety, and productivity through operational improvements to various elements of the surface transportation system. The program is constructed around

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times to traffic incidents.

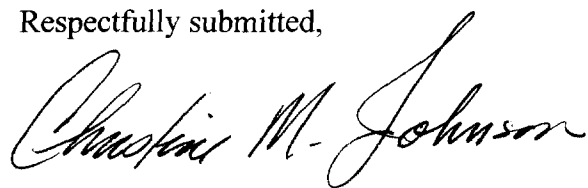
USDOT, through its ITS program, has sponsored operational tests that use various configurations of automated vehicle location technology and wireless communications in an effort to bring user services incorporating emergency notification, personal security, emergency vehicle fleet management, and public transit management, closer to deployment. One test in particular -- the CAPITAL project, which finished data collection in November 1995 -- assessed, among other things, the ability to geolocate cellular-equipped vehicles by colocating direction finding equipment at existing cellular sites. Partners in the CAPITAL project included the Federal Highway Administration (FHWA); the Virginia Department of Transportation; the Maryland State Highway Administration; Bell Atlantic-Nynex Mobile; E-Systems, a Raytheon company; and PB Farradyne. The early results of analysis of the project data, as contained in a University of Maryland Technical Memorandum on system geolocation accuracy, indicate that the system was capable of detecting 911 calls when initiated, and capable of geolocating vehicles, through the duration of the call, to within the Consensus Agreement's Phase II requirements. To our knowledge this project represents the most extensive test of its kind to date. Data collection occurred over approximately nine months and included approximately 1 million successful geolocations.⁴

Based on the early results of the CAPITAL project and other material submitted to this Docket, including relevant comments from KSI, Inc., Motorola, Inc., Southwestern Bell Mobile Systems, Inc., and Nextel Communications, Inc., we believe the radiolocation capability goals of Phase II of the implementation scenario proposed in the Consensus Agreement are feasible, and that a five year implementation period is well within the capabilities of the CMRS providers. The Joint Program Office for ITS accordingly supports the opinions reflected in the Consensus Agreement, and looks to the Commission to implement the proposed Rule in a manner and timeframe consistent with the best interests of all parties.

twenty-nine identified ITS user services. Several services -- emergency notification and personal security, incident management, public travel security, hazardous material (HAZMAT) incident response, and emergency vehicle management -- require interaction among emergency response personnel and services. Descriptions of these services are provided as Attachment A to this letter. USDOT has sponsored the development of a National System Architecture for ITS that describes the integration of functionality and data flows among the systems that will deliver the twenty-nine ITS user services. Implementation of the National Architecture will benefit greatly from the incorporation of E911 capability into commercial wireless communications networks.

⁴The technical evaluation report for the CAPITAL project is expected to be publicly available in the near future, and the JPO would be pleased to submit a copy of this report for the Commission's consideration as part of the record in this Docket.

Respectfully submitted,

A handwritten signature in black ink, reading "Christine M. Johnson". The signature is written in a cursive style with a large, stylized initial "C".

Dr. Christine M. Johnson
Director, ITS Joint Program Office

Attachment

Attachment A: Descriptions of Selected ITS User Services

Reply Comments of the Joint Program Office for Intelligent Transportation Systems, March 11, 1996, regarding Notice of Proposed Rule Making, CC Docket No. 94-102

Several services -- emergency notification and personal security, incident management, public travel security, hazardous material (HAZMAT) incident response, and emergency vehicle management -- require interaction among emergency response personnel and services, and would benefit greatly from the incorporation of E911 capability into commercial wireless communications networks. Descriptions of these directly applicable services follow below.

- **Emergency Notification and Personal Security**

Provides immediate notification of an incident and an immediate request for assistance.

This service includes two capabilities: driver and personal security, and automatic collision notification. Driver and personal security capabilities provide for user initiated distress signals for incidents like mechanical breakdowns or car jackings. Automatic collision notification identifies a collision and automatically sends information regarding location, nature, and severity to emergency personnel.

- **Incident Management**

Helps public and private organizations quickly identify incidents and implement a response to minimize their effects on traffic.

This service enhances existing capabilities for detecting incidents and taking the appropriate actions in response to them. The service would use advanced sensors, data processing, and communications to improve the incident management and response capabilities of transportation and public safety officials, the towing and recovery industry, and others involved in incident response. The service will help these groups to quickly and accurately identify a variety of incidents, and to implement a response which minimizes the effects of these incidents on the movement of people and goods. This service will also help transportation officials to predict traffic or highway conditions so that they can take action in advance to prevent potential incidents or minimize their impacts. While the direct users of this service are the public and private entities responsible for incident detection and response, the ultimate beneficiaries are commercial and transit operators, and the traveling public.

- **Public Travel Security**

Creates a secure environment for public transportation patrons and operators.

This service provides systems that monitor the environment in transit stations, parking lots, bus stops, and on-board transit vehicles, and generate alarms, either automatically or manually, when necessary. This improves security for both transit riders and operators. Transportation agencies and authorities can integrate this user service with other anti-crime activities.

- **Hazardous Material (HAZMAT) Incident Response**

Provides immediate description of hazardous materials involved to emergency responders.

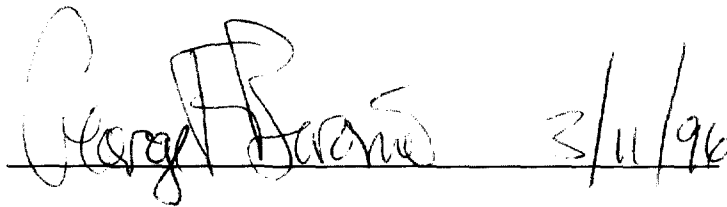
This service would enhance the safety of shipments of hazardous materials by providing enforcement and response teams with timely, accurate information on cargo contents to enable them to react properly in emergency situations. When an incident involving a truck carrying hazardous material occurs, the material or combination of materials involved would be electronically provided to emergency responders and enforcement personnel at the scene so that the incident can be handled properly.

- **Emergency Vehicle Management**

Reduces the time it takes emergency vehicles to respond to an incident.

This service provides fleet management, route guidance, and signal priority for emergency vehicles. Fleet management will improve the display of emergency vehicle locations and help dispatchers send the units that can most quickly reach an incident site. Route guidance directs emergency vehicles to an incident location, while signal priority optimize the traffic signal timing in an emergency vehicle's route. Primary users of this service include police, fire, and medical units.

I, George F. Beronio, do hereby certify that copies of the foregoing Reply Comments of the Joint Program Office for Intelligent Transportation Systems were served by U.S. Mail, first class postage pre-paid, on this 11th day of March, 1996, on all parties of record in CC Docket 94-102.

A handwritten signature, "George F. Beronio", is written in cursive over a horizontal line. To the right of the signature, the date "3/11/96" is handwritten.

George F. Beronio